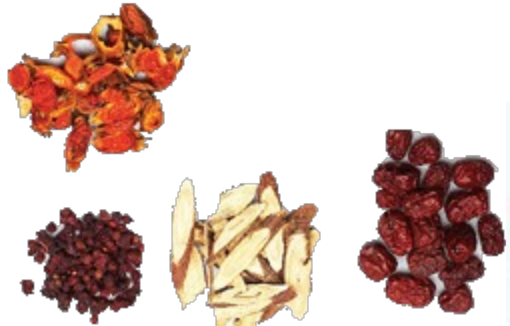
Cordyceps

冬蟲夏草



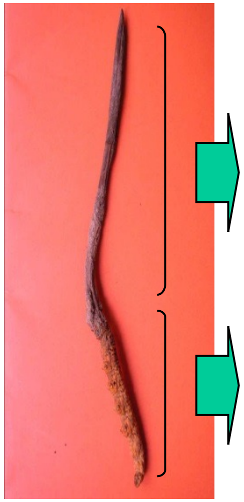
History

- Tibetan history records the first uses of yartsa gunbu in the 15th century
  - Cordyceps is considered to be derived from the Latin cord (club), ceps (head), and sinesis (from China). The fruiting body and attached mycelium of cordyceps have been used in Chinese culture and in traditional Chinese medicine for centuries.
  - Cordyceps is valued for its activity in **restoring energy**, **promoting longevity**, and **improving quality of life**.

義守大學 I-SHOU UNIVERSITY

Cordyceps 冬蟲夏草

- Origin
  - Cordyceps (summer-grass, winter-worm), one of the most valued traditional Chinese medicines, is used commonly for the replenishment of body health. It consists of the dried fungus *Cordyceps sinensis* growing on caterpillar larvae. For medication, the fruiting body (fungus) and the worm (caterpillar) are used together
  - 為麥角菌科Clavicipitaceae 真菌冬蟲夏草菌*Cordyceps sinensis* (Berk.) Sacc.寄生在蝙蝠蛾科昆蟲幼蟲上的子座及蟲體之複合體。



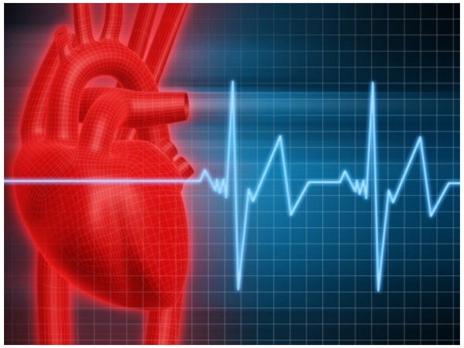
- Chemical ingredients
  - <u>Nucleosides</u>
    - Cordyceps polysaccharide, adenine, adenosine, uracil, uridine, guanidine, guanosine, hypoxanthine, inosine, thymine, thymidine, and deoxyuridine are the major component of cordycep
  - Other
    - proteins, peptides, essential amino acids, vitamins

[Reference]

- Li SP, et al. Quality control of Cordyceps sinensis , a valued traditional Chinese medicine. J Pharm Biomed Anal . 2006;41(5):1571-1584.

Cordyceps Uses & Pharmacology

- Aging
  - Traditionally, cordyceps has been used in the elderly population to improve weakness, impotence, and fatigue associated with aging
- Cardiovascular effects
  - Cordyceps has a long history of traditional medicinal use in heart disease
    - cardiac failure
    - Arrhythmias
    - hyperlipidemia



[Reference]

- Holliday JC, et al. Medicinal value of the caterpillar fungi species of the genus Cordyceps (Fr.) Link (Ascomycetes). A review. Int J Med Mushr . 2008;10(3):219-234.
- Zhu JS, et al. The scientific rediscovery of an ancient Chinese herbal medicine: Cordyceps sinensis : part I. J Altern Complement Med . 1998;4(3):289-303.

- Renal function
  - Clinical studies
    - improved renal function as demonstrated by increases in creatinine clearance, and decreases in blood urea nitrogen and serum creatinine
- Respiratory effects
  - Clinical studies
    - in asthma, chronic obstructive pulmonary disease, and bronchitis have suggested efficacy for cordyceps

[Reference]

- Zhu JS, et al. The scientific rediscovery of a precious ancient Chinese herbal regimen: Cordyceps sinensis : part II. J Altern Complement Med . 1998;4(4):
- Holliday JC, et al. Medicinal value of the caterpillar fungi species of the genus Cordyceps (Fr.) Link (Ascomycetes). A review. Int J Med Mushr . 2008;10(3):219-234.

⌘ Others

⌘ Diabetes

- ⌘ decreases blood glucose levels by improving glucose metabolism and enhancing insulin sensitivity

⌘ Hepatic function

⌘ Immune system and anti-inflammatory effects

[Reference]

- Lo HC, et al. The anti-hyperglycemic activity of the fruiting body of Cordyceps in diabetic rats induced by nicotinamide and streptozotocin. Life Sci. 2004;74(23):2897-2908.
- Ko WS, et al. Compound Cordyceps TCM-700C exhibits potent hepatoprotective capability in animal model. Fitoterapia . 2010;81(1):1-7.
- Kuo CF, et al. Abrogation of streptococcal pyrogenic exotoxin B-mediated suppression of phagocytosis in U937 cells by Cordyceps sinensis mycelium via production of cytokines. Food Chem Toxicol . 2007;45(2):278-285.

Cordyceps
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液態培養Liquid Culture

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extract

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西藏虫草資源豐富 目前年產值達30億元

2011年04月14日09:50　來源：《西藏日報》　手機看新聞

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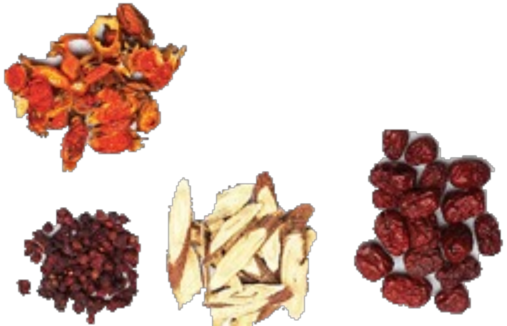
4月13日下午，全區冬虫夏草管理工作電視電話會議在拉薩召開。會議全面總結去年我區冬虫夏草管理工作，對今年全區冬虫夏草採集、交易、管理工作進行安排部署。

自治區黨委副書記、自治區主席白瑪赤林出席會議並講話。

自治區副主席格桑次仁對我區今年虫草管理工作進行了安排部署。自治區政府黨組成員、秘書長高揚主持會議。

白瑪赤林指出，近年來，全區各地各部門切實加強對冬虫夏草採集和交易的管理，各項工作成效顯著，冬虫夏草管理工作逐步走向規范化軌道。今年5月，我區將全面進入冬虫夏草採集和交易季節。全區各級黨委、政府要充分認識做好冬虫夏草管理工作的重要性，從講政治的高度，以對黨、對人民、對事業高度負責的態度，真正把虫草管理工作作為一項重要而緊迫的大事，增強責任意識，超前謀劃，精心組織，周密部署，維護好虫草採集和交易的正常秩序。

Thank you